

than SG, 35.4% vs 17.7% ($p < 0.05$). These complications included myocardial infarction 2.0/6.25, dysrhythmia 2.0/10.4%, renal insufficiency 2.5/11.1%, ileus 2.0/18.8% infection 0.0/6.3%, retroperitoneal bleed 2.0/2.1% and hematoma 9.8/2.1%. The American Surgical Association Risk Category (ASA) was equivalent in both groups. Mortality and discharge to a skilled nursing facility were more common in the surgical population (table). The mean length of stay (day) was 8.0 for surgery and 2.4 for the SG group.

Type of treatment	AGE (years)	ASA Category	Aneurysm size (cm)	Discharged Home*	Discharged Skilled care facility	In-hospital mortality	Expired or Skilled Care*	Direct hospital Cost (\$)
Surgery n=48	69 (42-82)	III=80.0% IV=17.5%	IV=6.1 ± 1.36	74.9%	19.1%	6.25%	26.0%	8,113
Stent Graft n=51	72 (52-88)	III=73.2% IV=24.4%	IV=4.9 ± 0.92	90.2%	9.7%	0.0%	9.8%	14,661

* $P < 0.05$

Conclusion: Aortic SG appears to be associated with decreased morbidity, mortality and length of hospital stay. Resource utilization defined as the direct hospital cost is higher, but there is less utilization of skilled nursing facilities after discharge.

1129-94

Effect of Treatment on Embolic Events in Patients With Severe Thoracic Aortic Atheromas: Interim Data Analysis From the NYU Atheroma Group

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Background: Severe aortic plaques seen on TEE are associated with a high risk of stroke and peripheral embolization. Previous studies have indicated a beneficial effect of warfarin, but only in small groups of patients.

Methods: Since 1989, 1114 pts had thoracic aortic atheromas, at least 5mm or mobile, on TEE at our institution. Retrospective information regarding the occurrence of embolic events (stroke, TIA, or peripheral) after atheroma diagnosis by TEE, as well as treatment with warfarin, antiplatelet drugs (aspirin, ticlopidine, clopidogrel), or statins was obtained from patient records or direct patient or family contact. Treatment was determined by referring physicians and was not randomized. Presented here are interim data from 468 randomly selected pts.

Results: Of the 468 pts studied, 179 (38%) received warfarin, 247 (53%) received antiplatelet treatment, and 165 (35%) received statin. An embolic event occurred in 97 pts (21%) (stroke = 48, TIA = 34, peripheral embolization = 15). Warfarin was being given to 32 (33%) of these 97 pts, antiplatelet drugs to 48 (49%), and statin to 18 (19%) at the time of their embolic events. Of the 371 pts without emboli, 147 (40%) were receiving warfarin, 199 (54%) antiplatelet drugs, and 147 (40%) were on statin. Many pts were on multiple drug regimens. The protective effect of statin with respect to embolic events was statistically significant (OR 0.35, 95% CI 0.2 - 0.6; $P = 0.00009$). No significant protective effect was found for warfarin ($P = 0.22$) or antiplatelet drugs ($P = 0.45$).

Conclusions: Although these data are from an interim analysis of 42% of our pts, the results indicate that there may be a protective benefit of statin, and a lack of a significant protective effect of warfarin and antiplatelet drugs in pts with severe thoracic aortic atheromas on TEE. Data from the entire cohort will be more definitive.

1129-95

Association of Self-Reported Leisure Activity and Coronary Risk With Carotid Artery Reactivity

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Background: Regular leisure activity has been shown to reduce cardiovascular risk and positively influence risk factors. Vascular reactivity, including carotid and brachial arteries, is also correlated with coronary risk. We studied the association between self-reported, leisure activity and carotid reactivity in response to a sympathetic stressor in 188 adults. We also evaluated the vascular response with respect to 3 levels of coronary risk. **Methods:** Vascular reactivity was evaluated by percent and absolute change of the carotid artery diameter in response to a cold pressor test (CPT) and nitroglycerin. Physical activity was assessed by a participant-recall questionnaire. Patients were stratified as average-risk (1 abnormal lipid level), high-risk (one coronary risk factor and ≥ 1 abnormal lipid level), or CAD (coronary artery disease-prior myocardial infarction or coronary stenosis $> 50\%$). **Results:** 67% of patients self-reported regular active, moderately, or extremely active leisure activity versus sedentary or minimally active. Of those patients, average-risk patients increased their diameter in response to CPT by $4.3 \pm 2.7\%$, which was less in the high-risk group ($1.4 \pm 1.5\%$), and vasoconstriction occurred in the CAD group ($-2.2 \pm 1.5\%$) ($p < 0.001$ for comparisons). Among CAD patients, an active lifestyle was associated with significantly less vasoconstriction compared to less active patients ($-2.2 \pm 1.5\%$ vs. $-3.5 \pm 1.6\%$, $p < 0.05$). After adjusting for age, BMI, HDL-cholesterol, triglycerides, baseline diameter and systolic blood pressure, linear regression of carotid reactivity in response to CPT in the CAD group maintained the significant association between leisure activity and carotid reactivity (Model $R^2 = 0.38$, $p < 0.05$). **Conclusion:** In patients self-reporting active levels of leisure activity, this study suggests an inverse response of carotid reactivity to CPT in the presence of more coronary risk factors, with a significant benefit of leisure activity in patients with CAD. This supports national recommendations that regular leisure activity may reduce cardiovascular risk potentially through improved endothelial function, specifically in patients with CAD.

1129-96

Ischemic ECG Response During Dipyridamole Stress Testing Is a Powerful Predictor of Severe Coronary Artery Disease in Patients With Claudication Due to Peripheral Arterial Disease

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The significance of ST-segment depression in patients undergoing exercise stress testing has been well investigated; the significance of new ischemic ST depression during dipyridamole stress testing has not. This was a cross-sectional observational study of 100 consecutive men or women (mean age 65 ± 14 years) with intermittent claudication of the lower extremities due to peripheral arterial disease (PAD) as indicated by Ankle Brachial Index (ABI) < 0.8 , who also demonstrated new (compared to baseline) ischemic ST-segment depression following intravenous dipyridamole infusion (horizontal or downsloping ST-segment depression of at least 0.1 mv at 80 ms from the J point on the ECG). Dipyridamole was infused using a standard protocol (0.14 mg/kg infused over 4 min). All patients (100%) had abnormal single photon emission computed tomographic (SPECT) images consistent with ischemia. Of the 100 patients, 92 agreed to undergo coronary angiography. Coronary angiography revealed that all patients had significant left main and/or multivessel coronary artery disease (at least 75% luminal stenosis). Thus, the appearance of new ST-segment depression during dipyridamole infusion is a powerful predictor of severe coronary artery disease in patients with claudication due to PAD.

POSTER SESSION

1130 Lipid Modifying Drug Therapy: Special Patient Populations

Monday, March 18, 2002, 3:00 p.m.-5:00 p.m.

Georgia World Congress Center, Hall G

Presentation Hour: 3:00 p.m.-4:00 p.m.

1130-73

Simvastatin Plus Niacin Protect Against Atherosclerosis Progression and Clinical Events in Coronary Artery Disease Patients With Metabolic Syndrome

Xue-Qiao Zhao, Josh Morse, Alan Chait, Lloyd Fisher, Alice Dowdy, John J. Albers, Jiri Frohlich, B. Greg Brown, University of Washington, Seattle, Washington, University of British Columbia, Vancouver, British Columbia, Canada.

Background: Effects of simvastatin plus niacin (SN(+)) on lipids, coronary atherosclerosis progression and clinical events in patients (pts) with metabolic syndrome (MSyn) were evaluated in the NIH-funded, a double-blinded, placebo-controlled, HDL Atherosclerosis Treatment Study (HATS). **Method:** Of 160 CAD pts enrolled and randomized to treatment (Rx) with SN(+) (daily dose 2-4 gm+10-20 mg) or placebo (SN(-)) in HATS, 77 (48%) had MSyn, which was defined as having any 3 of the following 4 criteria: (1) triglycerides ≥ 50 mg/dl; (2) HDLc < 40 in men or < 50 in women; (3) treated hypertension or blood pressure $\geq 130/85$ mmHg; and (4) fasting glucose ≥ 110 mg/dl. The lipid responses to Rx, primary QCA endpoint (mean change in % stenosis) and clinical endpoint (CAD death, MI, stroke, or revascularization) were compared between SN(+) and SN(-) in both pts with and without MSyn. **Results:** See table. *: vs baseline $p < 0.001$, †: vs SN(-), $p < 0.05$, ‡: vs MSyn(-) $p = 0.02$. **Conclusions:** Patients with MSyn have a significantly greater rate of CAD progression and a 2-fold higher frequency of clinical events than without. Treatment with SN effectively lowers total cholesterol, triglycerides and LDLc, raises HDLc without significantly affecting fasting glucose and insulin levels, and reduces CAD progression by 90% and cardiovascular events by 40% in patients with MSyn. These data suggest that patients with MSyn should be treated more aggressively and simvastatin plus niacin appear to be an effective therapy.

	N	Total cholesterol Base/Rx	LDLc Base/Rx	Triglycerides Base/Rx	HDLc Base/Rx	Glucose Base/Rx	Insulin Base/Rx	QCA change (SD)	% Event n (%)
SN(+)/MSyn(+)	32	203/148*	125/76*	251/176*	31/39*	115/118	30/37	0.4 (4.0)†	6/34 (18%)
MSyn(-)	41	195/138*	129/78*	208/128*	31/36*	97/106	23/27	0.1 (2.2)†	1/46 (2%)†
SN(-)/MSyn(-)	37	197/192	115/109	258/271	32/33	109/109	24/28	4.1 (5.9)‡	13/43 (30%)
MSyn(+)	36	191/187	130/121	153/165	32/34	92/100	20/24	1.4 (2.9)	5/37 (14%)

1130-75

Impact of Pravastatin on Secondary Prevention of Coronary Artery Disease in Normolipidemic Patients: Five-Year Angiographical Follow-Up Results of Prospective Randomized Trial (PCS study)

Tsutomu Nakagawa, Tohru Kobayashi, Nobuhisa Awata, Johan H. Reiber, Shinichi Sato, Tomoko Kobayashi, Yoshihiro Takeda, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan, Department of Radiology, Leiden University Medical Center, Leiden, The Netherlands.

Background: Prevention of Coronary Sclerosis (PCS) Study was designed to evaluate the long-term angiographic effect of pravastatin on secondary prevention of progression of coronary artery disease (CAD). **Methods:** 329 patients with CAD were enrolled and classified into three groups due to serum total cholesterol level: Group 1 (TC ≥ 220 mg/